

In the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (withdrawn): A method for improving the bond strength between at least two heat deformed thermoplastic sheets forming a unitary structure, the method comprising:

extruding a continuous web of thermoplastic having a top surface and a bottom surface;

conveying the continuous web of thermoplastic through a downstream work station scuffing the top surface, wherein the top surface is characterized having increased surface area relative the bottom surface;

shearing the continuous web of thermoplastic providing a plurality of sheets having scuffed top surfaces;

thermoforming simultaneously at least a first sheet over a first mold and a second sheet over a second mold upon a machine frame; and

compressing a heated first sheet against a heated second sheet between the first mold and the second mold upon the machine frame to bond the scuffed top surface of the first sheet to the smooth surface of the second sheet.

Claim 2 (withdrawn): The method of claim 1 wherein three scuffed
2 sheets are thermoformed simultaneously and compressed sequentially
upon a machine frame to provide a unitary triple sheet structure.

Claim 3 (withdrawn): The method of claim 1 wherein the continuous
2 web of thermoplastic is conveyed through at least one down-stream
workstation whereby the top and bottom smooth surfaces of said
4 continuous web are scuffed increasing the surface areas thereof.

Claim 4 (withdrawn): An article of the method of claim 3
2 characterized in that the article is a thermoformed plastic pallet.

Claim 5 (withdrawn): An article made in accordance with the
2 procedure comprising:

(a) extruding a continuous web of thermoplastic having a top
4 surface and a bottom surface;

(b) conveying the continuous web of thermoplastic through a
6 scuffing work station where after the top surface is characterized
having increased surface area relative the bottom surface;

(c) shearing the continuous web of thermoplastic providing a
8 plurality of sheets having scuffed top surfaces;

10 (d) heating a first sheet;

(e) forming the first sheet with a first mold;

12 (f) heating a second sheet;

(g) forming the second sheet with a second mold;

14 (h) aligning the first mold with the second mold so a scuffed
top surface of the first sheet faces a bottom surface of the second

16 sheet:

- (i) moving the first mold toward the second mold; and
- 18 (j) joining together sections of the scuffed top surface of the first sheet with sections of the bottom surface of the second
- 20 sheet to form a twin sheet subassembly.

Claim 6 (withdrawn): An article made in accordance with claim 5
2 wherein the thermoplastic is composed of a polyolefin resin.

Claim 7 (withdrawn): An article made in accordance with claim 5
2 wherein after step (j) the method further comprises:

- (k) heating a third sheet;
- 4 (l) forming the third sheet with a third mold;
- (m) aligning the third mold with the twin sheet assembly;
- 6 (n) moving the twin sheet assembly toward the third mold; and,
- (o) joining together sections of a scuffed top surface of the
- 8 twin sheet assembly with sections of the bottom surface of the third sheet to form a triple sheet article.

Claim 8 (withdrawn): An article made in accordance with claim 5
2 wherein at least one exposed surface of the article is scuffed providing a high coefficient of friction skid resistant surface.

Claim 9 (withdrawn): An article made in accordance with claim 5
2 wherein after the step (e) a rigid member is positioned over the
first sheet prior to the step (j) to form a rigidified twin sheet
4 assembly.

Claim 10 (withdrawn): An article made in accordance with claim 7
2 wherein after the step (j) a rigid member is positioned over the
twin sheet assembly prior to the step (o) to form a rigidified
4 triple sheet article.

Claim 11 (previously presented): An article resistant to fire and
2 the heat of fire, the article comprising:

a first sheet of co-extruded thermoformable plastic,
4 comprising a surface layer of an intumescent polyolefin composition
resistant to fire and a substrate layer of a polyolefin resin,
6 molded over a first mold to provide a first member;

a second sheet as in the first sheet molded over a second mold
8 to provide a second member;

a third member of molded plastic composed of polyolefin resin
10 comprising an array of upward extending ribs, an array of downward
extending channels and between the ribs and channels hollow areas
12 providing dead air space;

the third member being compressed between the first and second
14 sheets to provide a rigid unitary structure wherein upper surfaces
of the ribs bond to the substrate layer of the first sheet and
16 lower surfaces of the channels bond to the substrate layer of the
second sheet;

18 the surface layers of the intumescent polyolefin compositions
of the first and second sheets being exteriorly visible preventing
20 the substrate layers from supporting a flame upon exposure to fire;
and

22 the surface layers of the intumescent polyolefin compositions
of the first and second sheets in combination with the dead air
24 space insulating the third member, the insulated third member
resisting the heat of the fire to remain rigid.

Claim 12 (previously presented): An article as in claim 11 wherein
2 the third member includes additives imparting high temperature
strength.

Claim 13 (previously presented): An article as in claim 11 wherein
2 the article is a material handling apparatus.

Claim 14 (previously presented): An article as in claim 11
2 comprising a wireless communications device, the device being
adapted to transmit an emergency signal to a remote monitoring
4 station when said article is exposed to fire or the heat of fire.

Claim 15 (previously presented): A material handling apparatus
2 comprising:

an electronic device, the electronic device comprising at
4 least a wireless communicator interfacing with a remote station,
thermographic instrumentation developed to monitor external
6 temperature, and circuitry integrating the communicator to the
instrumentation;

8 the thermographic instrumentation responding to variation in
external temperature indicative of a fire by actuating circuitry,
10 the circuitry triggering communicator to send an emergency signal
to the remote station, the remote station thereby being alerted to
12 heat indicative of fire.

Claim 16 (previously presented): A material handling apparatus as
2 in claim 15 wherein the electronic device has at least one supply
of power, the at least one supply of power being derived from a
4 solar battery positioned externally upon a surface of said material
handling apparatus.

Claim 17 (previously presented): A material handling apparatus as
2 in claim 15 wherein the thermographic instrumentation includes a
thermoscopic sensor, the sensor being exteriorly positioned to
4 monitor temperature variation.

Claim 18 (previously presented): A material handling apparatus as
2 in claim 15 wherein the electronic device is mounted upon a plate
for remote attachment to an external surface of the material
4 handling apparatus exposed to fire and the heat of fire.

Claim 19 (original): A fire resistant pallet comprising:
2 a pallet assembly; and
a fire resistant layer formed upon an exterior of said pallet
4 assembly.

Claim 20 (original): The fire resistant pallet according to claim
2 19 wherein said pallet assembly is made of a polyolefin resin and
wherein said fire resistant layer is made of an intumescent
4 polyolefin material, said pallet assembly and said fire resistant
layer being co-extruded.

Claim 21 (original): The fire resistant pallet according to claim
2 20 wherein said intumescent polyolefin material is disposed only on
an exterior of said pallet assembly.

Claim 22 (previously presented): The fire resistant pallet
2 according to claim 20 wherein said pallet assembly comprises:

4 a pallet shell having a first shell half formed from a first
member and a second shell half formed from a second member; and

6 a support structure disposed between and instantly fused to
said first shell half and said second shell half to provide support
to said pallet shell, said support structure extending across a
8 length of at least one of said first shell.

Claim 23 (original): The fire resistant pallet according to claim
2 19 wherein said fire resistant layer comprises:

4 an intumescent polyolefin composition resistant to fire, said
intumescent polyolefin composition being co-extruded with at least
a portion of said pallet assembly.

Claim 24 (previously presented): A fire resistant pallet
2 comprising:

4 at least a first layer of moldable intumescent material and a
second layer of moldable polyolefin material, the first and second
layers being co-extruded together prior to being molded into said
6 fire resistant pallet.

Claim 25 (previously presented): The fire resistant pallet of claim
2 24 wherein the moldable intumescent material of the first layer
contains a polyolefin material of the second layer.

Claim 26 (previously presented): A fire resistant pallet
2 comprising:

4 a moldable mixture of intumescent materials comprising a
polyethylene resin.

Claim 27 (previously presented): The fire resistant pallet of claim
2 26 wherein the moldable mixture of intumescent materials in a sheet
construction has a 4:1 draw ratio to form a deep leg pocket.